

CLAIMS

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1. Method for navigating within a navigation area (2), wherein a plurality of navigation tags (1) has been mounted at predetermined positions within the navigation area (2), characterised in that the method comprises the steps of:

determining (11, 22) a sequence of navigation tags (1), which are associated with a desired route within the navigation area (2), based on the positions (7, 18) of the navigation tags (1) and on topographic information (8, 19) on the navigation area (2); and navigating said route by passing navigation tags (1) of said sequence of navigation tags, whereby passing of a navigation tag (1) is acknowledged (12, 13).

20 2. Method according to claim 1, characterised in that said positions (7) are stored in a mobile navigation unit (6),

that said mobile navigation unit (6) further stores topographic information (8) on the navigation area (2) and

25 that said sequence of navigation tags (1) is determined (11) by said mobile navigation unit (6) based on said stored positions (7) and said topographic information (8).

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3. Method according to claim 1, characterised in that said positions (18) are stored in a host unit (17),

that said host unit (17) further stores topographic information (19) on the navigation area (2),
that said stored positions (18) and topographic information (19) are transferred to (9, 10, 20, 21) and
5 stored in (7, 8) a mobile navigation unit (6), and that said sequence of navigation tags (1) is determined (11) by said mobile navigation unit (6) based on said stored positions (7, 8) and said topographic information (8).

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4. Method according to claim 3, characterised in that said transfer of the stored positions (18) and topographic information (19) is performed by means of a wired link (9, 10, 20, 21) between host unit (17) and
15 mobile navigation unit (6) or by means of a wireless link (9, 10, 20, 21).

5. Method for navigating within a navigation area (2), wherein a plurality of navigation tags (1) has been
20 mounted at predetermined positions within the navigation area (2), characterised in that the method comprises the steps of:

determining (11, 22) a sequence of navigation tags (1), which are associated with a desired route within the
25 navigation area (2), based on the positions (7, 18) of the navigation tags (1) and on topographic information (8, 19) on the navigation area (2); and

30 navigating said route by passing navigation tags (1) of said sequence of navigation tags, whereby passing of a navigation tag (1) is acknowledged (12, 13);

wherein said positions (18) are stored in a host unit (17),

5 wherein said host unit (17) further stores topographic information (19) on the navigation area (2),

10 wherein said sequence of navigation tags (1) is determined (22) by said host unit (17) based on said stored positions (18) and said topographic information (19), and

15 wherein said sequence of navigation tags (1) is transferred (24, 25) to a mobile navigation unit (6) from the host unit (17).

6. Method according to claim 5, characterised in that said sequence of navigation tags (1) is transferred (24, 25) to said mobile navigation unit (6) from said host unit (17) at once, or in parts, whereby transfer of each part of said sequence of navigation tags (1) is initiated by said acknowledgement (12, 13) of the passing of a navigation tag (1).

25 7. Method according to claim 6, characterised in that said transfer of the sequence of navigation tags is performed by means of a wired link (24, 25) between host unit (17) and mobile navigation unit (6) or by means of a wireless link (24, 25).

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8. Method according to any of the claims 2-7, characterised in that said mobile navigation unit (6)

is capable of indicating (16) information on the navigation tag (1) that should be passed next.

9. Method according to claim 8, characterised in that
5 said information on the navigation tag that should be passed next comprises the direction and/or distance to the next navigation tag (1), and/or an identifier of the next navigation tag (1).

10 10. Method according to claim 9, characterised in that said identifier is a colour and/or a number and/or a symbol.

11. Method according to any of the claims 8-10,
15 characterised in that said information on the navigation tag that should be passed next is indicated optically (16) and/or acoustically and/or haptically.

12. Method according to any of the claims 8-11,
20 characterised in that said acknowledgement of the passing of a navigation tag is performed automatically (13) or manually (12) and updates said indication (16) of the information on the navigation tag (1) that should be passed next.

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13. Method according to claim 12, characterised in that said automatic acknowledgement is based on a wireless link between mobile navigation unit (6) and navigation tag (1), such as a radio (15) or optic link.

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14. Method according to claim 12, characterised in that said manual acknowledgement is based on a wired connection between mobile navigation unit and

navigation tag, or by interaction (12) between the user of the mobile navigation unit and the mobile navigation unit (6).

5 15. Method according to any of the claims 2-14, characterised in that the navigation tag (1) itself is capable of storing information and that said information is transferred to said mobile navigation unit when the navigation tag is passed.

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16. Method according to claim 15, characterised in that such information comprises the position of the navigation tag (1) and/or information on the location within the navigation area (2) where the navigation tag (1) is mounted.

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17. Method according to any of the claims 1-16, characterised in that the position of the navigation tags (1) are determined by means of a terrestrial or 20 satellite-based positioning system (3) such as the Global Positioning System (GPS) and/or by maps and/or plans of the navigation area (4).

18. Method according to any of the claims 2-17,

25 characterised in that the mobile navigation unit (6) is integrated into or compatible to a mobile device such as a mobile phone, a personal digital assistant or a GPS receiver.

30 19. Method according to any of the claims 4-18 as long as they refer back to claim 4, characterised in that the mobile navigation unit (6) is integrated into or compatible to a mobile phone associated with a mobile

radio system, that the core network of the mobile radio system can gain access to said host system (17), and that said stored positions (18) and topographic information (19) is transferred to the mobile navigation unit (6) via the air interface of the mobile radio system.

20. Method according to any of the claims 7-18 as long as they refer back to claim 7, characterised in that the mobile navigation unit (6) is integrated into or compatible to a mobile phone associated with a mobile radio system, that the core network of the mobile radio system can gain access to said host system (17), and that said sequence of navigation tags is transferred to the mobile navigation unit via the air interface of the mobile radio system.

21. System for navigating in a navigation area, wherein a plurality of navigation tags (1) has been mounted at predetermined positions within said navigation area (2), characterised in that the system comprises: means for determining a sequence of navigation tags (11, 22), which are associated with a desired route within the navigation area (2), based on said positions (18) of the navigation tags (1) and on topographic information (19) on the navigation area (2); and means for acknowledging (12, 13) the passing of a navigation tag (1), when said route is navigated by passing navigation tags (1) of said sequence of navigation tags (1).

22. System according to claim 21, characterised in that

said positions are stored (7) in a storage unit that is comprised in a mobile navigation unit (6),
that said mobile unit (6) further comprises a storage unit with topographic information (8) on the navigation area (2) and
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that said mobile navigation unit (6) further comprises means (11) for determining the sequence of navigation tags (1) based on the contents of both storage units (7, 8).

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23. System according to claim 21, characterised in
that said positions (18) are stored in a host unit (17),
that said host unit (17) further comprises a storage
15 unit with topographic information (19) on the navigation area (2),
that said host unit (17) and a mobile navigation unit (6) comprise means (9, 10, 20, 21) for transferring said stored positions (18) and topographic information (19) from the host unit (17) to the mobile navigation unit (6),
20 that said mobile navigation unit (6) further comprises means (7, 8) for storing said positions (18) and topographic information (19), and
25 that said mobile navigation unit (6) further comprises means (11) for determining the sequence of navigation tags (1) based on said stored positions (7) and said stored topographic information (8).

30 24. System according to claim 23, characterised in said means (9, 10, 20, 21) for transferring said stored positions (18) and topographic information (19) are

capable of establishing a wired link between host unit (17) and mobile navigation unit (6) or a wireless link.

25. System for navigating in a navigation area, wherein a
5 plurality of navigation tags (1) has been mounted at
predetermined positions within said navigation area
(2), characterised in that the system comprises:

means for determining a sequence of navigation tags
10 (11, 22), which are associated with a desired route
within the navigation area (2), based on said positions
(18) of the navigation tags (1) and on topographic
information (19) on the navigation area (2); and

15 means for acknowledging (12, 13) the passing of a
navigation tag (1), when said route is navigated by
passing navigation tags (1) of said sequence of
navigation tags (1),

20 wherein said positions are stored in a storage unit
(18) that is comprised in a host unit (17),

wherein said host unit (17) further comprises a storage
unit with topographic information (19) on the
25 navigation area (2),

wherein said host unit (17) further comprises means
(22) for determining the sequence of navigation tags
(1) based on the contents of both storage units (18,
30 19), and

wherein said host unit (17) and said mobile navigation
unit (6) comprise means (24, 25) for transferring said

sequence of navigation tags (1) from the host unit (17) to the mobile navigation unit (6).

26. System according to claim 25, characterised in that
5 said means (24, 25) for transferring said sequence of navigation tags (1) are capable of establishing a wired link between host unit (17) and mobile navigation unit (6) or a wireless link.

10 27. System according to any of the claims 21-26, characterised in that said mobile navigation unit (6) comprises means (16) for indicating information on the navigation tag (1) that should be passed next.

15 28. System according to claim 27, characterised in that said means for indicating information on the navigation tag that should be passed next comprises optic (16) and/or acoustic and/or haptic means.

20 29. System according to any of the claims 27-28, characterised in that means are provided for automatic (13) or manual acknowledgement (12) of the passing of a navigation tag (1), and
25 that means are provided to update said indication (16) of the information on the navigation tag (1) that should be passed next.

30. System according to claim 29, characterised in that said automatic acknowledgement is based on a wireless link between mobile navigation unit (6) and navigation tag (1), such as a radio (15) or optic link.

31. System according to claim 29, characterised in that
said manual acknowledgement is based on a wired
connection between mobile navigation unit (6) and
5 navigation tag (1), or on means (12) enabling an
interaction between the user of the mobile navigation
unit (6) and the mobile navigation unit (6).

32. System according to any of the claims 21-31,
10 characterised in
that the navigation tag (1) itself comprises means for
storing information, and
that both navigation tag (1) and mobile navigation unit
(6) comprise means for transferring said information
15 from the navigation tag (1) to the mobile navigation
unit (6) when the navigation tag (1) is passed.

33. System according to any of the claims 21-32,
characterised in that the mobile navigation unit (6) is
20 integrated into a mobile device such as a mobile phone,
a personal digital assistant or a GPS receiver.

34. System according to any of the claims 24-33 as long
as they refer back to claim 24, characterised in that
25 the mobile navigation unit (6) is integrated into or
compatible to a mobile phone associated with a mobile
radio system, that the core network of the mobile radio
system can gain access to said host system (17), and
that said stored positions (18) and topographic
30 information (19) are transferred to the mobile
navigation unit (6) via the air interface of the mobile
radio system.

35. System according to any of the claims 26-33 as long
as they refer back to claim 26, characterised in that
the mobile navigation unit (6) is integrated into or
5 compatible to a mobile phone associated with a mobile
radio system, that the core network of the mobile radio
system can gain access to said host system (17), and
that said sequence of navigation tags (1) is
transferred to the mobile navigation unit (6) via the
10 air interface of the mobile radio system.

36. A computer program product directly loadable into the
internal memory of a digital computer, comprising
software code portions for performing the steps of any
15 of the claims 1-20 when said product is run on a
computer.

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